Clean Water Action Council

OF NORTHEAST WISCONSIN

Celebrating 36 years of working to protect public health and the environment in Northeast Wisconsin

FALL 2021

The Search for Sustainability

CWAC Members Demonstrate Sustainability

The Full Circle Farm family: Andrew Adamski, Heather Toman, Val Dantoin, and Rick Adamski. Growing high quality organic food while improving the soil.

Dave Verhagen & Sher Brandl. Improving soil and using solar energy.

Dave and Chris Kellems remodel with sustainability in mind.

Julie and Dean Hoegger. Working to improve the land and minimize their carbon footprint.

John Hippensteel delights in teaching the next generation how to decrease dependence on fossil fuels.

Introduction by CWAC President Dean Hoegger

This issue is inspired primarily by two things. First, in 2017, several of our members were cast in the film, *Searching for Sustainability*. Member and film promoter Val Dantoin presented the film with a discussion at our 2018 CWAC banquet. The film can be viewed at https://vimeo.com/243924154. Second, members often suggest that we publish a newsletter with a positive theme. Well, here it is!

Sustainability means many different things to different people. In the 1930s, Aldo Leopold wrote, "The oldest task in human history: to live on a piece of land without spoiling it." A similar but more extensive belief is expressed by many Native American communities. The philosophy of the Seven Generations concept places the responsibility and well-being of future generations on every generation that comes before them.

In the Summer 2021 CWAC Newsletter, members were invited to submit contributions to this theme. We thank those members who responded and shared their search for sustainability in this issue.

Members Rick Adamski and Val Dantoin Model Sustainable Farming

By Dean Hoegger

Editor's Note: Val and Rick have been long-time CWAC members, contributors to the silent auction, and event presenters.

The chicken hen house is shown on the left. Its rotation follows grazing by hogs or cattle. Cattle graze in another field shown in the background.

Clean Water Action Council members Rick Adamski and Val Dantoin are true visionaries when it comes to sustainable farming. Along with their son Andrew Adamski and his partner, Heather Toman, they operate Full Circle Farm. The farm has been in the Adamski family for over 120 years. Rick returned to the farm after college, in 1986, and immediately started a newfangled farming practice called managed grazing. In the early 2000s the farm's 80-cow herd became certified organic. In recent years, the farm's production has become greatly diversified since the dairy cows left the farm in 2014.

As Andrew explains, by diversifying the farm's products, the farm's income then comes from many different sources, unlike farmers who are producing only milk and are then hit hard when the price of milk drops. With diversification come new marketing strategies.

Now the focus is on Community Supported Agriculture (CSA) and selling shares of organic vegetables to be delivered throughout the season. They are also part of a farmers' market cooperative — a meat CSA — and Full Circle Farm provides the 100% grass-fed beef as well as pastured pork. The eventual goal is to create a full diet CSA which includes fruits, vegetables, grass fed beef, pastured pork, and eggs.

"Our mission is to provide high-quality organic food while creating a community-based farming model that will revitalize farms and communities all across the country."

- Full Circle Farm

How is this diversified farm showcasing sustainability? First and foremost, the pastures used in the managed grazing of livestock on the 260-acre farm keeps the soil blanketed at all times. The soil is rarely exposed to wind and water erosion. Andrew describes how they try to keep all the rain that falls on the farm, on the farm. The soils have relatively high organic matter, which acts like a sponge to retain rainfall and help it soak in.

Chickens are also part of the sustainable management plan. Hen houses on skids are rotated in the grassy fields to follow grazing by cattle or hogs. The chickens feed on insects and clovers as well as organic grain. All the animals move through the pastures and harvest their own food rather than using large amounts of fossil fuels to harvest, store and then feed to the animals up at the barn, as most confinement farms do. The livestock also spread their own manure in the fields, rather than having it scraped up and spread by the farmer. The fuel costs on this farm are about 1/3 less than a conventional livestock farm. As the farm's fruit, berry, and nut production mature, additional forage will be provided for the animals.

All the Full Circle Farm family will tell you it is all about the soil. "We want to bank our wealth in the soil," Val explains. "We want the land available for future generations. That's part of sustainability. We practice managed grazing as a key tool to conserve land and keep manure, soil, and nutrients out of the water…rather than letting them slip off the farm and into waterways where they become pollutants." They call this kind of agriculture "REgenerative" because they build soil organic matter and sequester carbon with living roots in the ground all year around.

Besides being good stewards of the land, the farm reduces its carbon footprint using both wind and solar. A wind turbine generates most of the farm's electricity and solar-heated water is used much of the year. Green houses capture sunlight and heat for producing early vegetable crops and producing seedlings to go into the field.

The farm produces 50% of its electricity with this 35kw wind turbine.

The folks at Full Circle Farm value the family farm model. "We are strong advocates of family-

based agriculture; this means that those who work on the farm are the ones who own the farm. Owners are not 'above' laborers. So it is integrating decision-making between labor and the management," explains Rick. They also encourage participation by interns, and they accept volunteers to work for a CSA share or just to learn more about sustainable farming.

Besides modeling sustainable farming practices, Rick and Val do even more to promote this model. Val developed and teaches over 20 courses in the Sustainable Food & Agriculture Associate Degree Program at Northeast Wisconsin Technical College in Green Bay. She is also on the board of the SLO Farmers' Cooperative (Sustainable, Local, and Organic). Rick is the District 8 representative, and board vice president of the Wisconsin Farmers Union, which is committed to enhancing the life of family farmers and rural communities. Both Rick and Val have been presenters at statewide workshops and conferences over the years.

The farm is located at W2407 Hofa Park Rd, Seymour, WI 54165, where it is generally open for visitors who make an appointment and order products for pick up through their online portal. Orders can be made online at https://www.fullcircle.farm/ or call 920-373-2325 for more information about halves or quarters of grass-fed beef.

You can also find the farm represented at the Green Bay Farmers Market and the Appleton Farmers Market, both on Saturday mornings.

Members Dave Verhagen and Sher Brandl are working to improve their soil and reduce their carbon footprint.

By Dave Verhagen

Editor's note: Dave and Sher have been long-time members and supporters of CWAC. Dave has served on the Board of Directors since 2018.

Improving our soil.

We own 54 acres outside of De Pere. After renting out 32 acres to a neighboring farmer for nearly thirty years, we ended their lease and decided to restore the worn-out farmland.

Our property lies along the East River. It is ancient river-bottom. The land is mostly a very fine clay with little humus in its topsoil. Modern farming practices have resulted in serious erosion and have required extensive use of fertilizers and herbicides to produce profitable crops.

We met with the district conservationist at the local USDA Farm Service Agency to discuss the state of our land. They administer programs to help landowners conserve, protect, and/or restore agricultural land. The agent walked the land with us, making observations and providing us with choices to decide how we wanted to proceed. You do not need to be a farmer to participate in any programs. You do have legal obligations once you sign a contract.

The agent broke our land into sections based upon erosion potential and other factors. Seven and a third acres bordering the East River and wetlands adjacent to it were put under a program designed to address erosion issues. It has been planted with a mixture of five native grasses and 10 varieties of forbs and legumes.

The remaining acreage has been enrolled in Monarch butterfly habitat. That seed mix includes three native grasses and a variety of native flowers

that should provide blossoms from late April through late October for nectar feeders of all species.

It didn't look like much in year one. The worn-out clay is quite hospitable to weeds common in the countryside. Our planted varieties remained small as they set roots and established themselves. In year two we are seeing the native grasses emerge and some of the flowering ones as well. We mow the fields throughout the season to keep the weeds in check and allow sunlight to reach our planted species.

In year three we expect the native plants to begin taking over the landscape. We will continue to mow early in the season just for the larger, more aggressive weeds. In the following year, we will need to switch over to burning the fields once a year. Burning will clear out the dead plant matter at the soil surface and allow the native plants to fully take over. The native prairie plants are well adapted to burning and recover more robustly than common weeds. Burning will give them another advantage to take over the field.

The USDA soil scientist assures us that with mowing and burning we will be able to establish a plant community that will build soil and fertility faster than Nature would accomplish without our intervention. We are already seeing positive results. Deep washouts that occurred in the field annually are now being stabilized with plants and are no longer expanding. The number of frogs in the wetlands is on the upswing, if the volume of their spring mating songs is any measure. And the wildlife, from turkeys and Sandhill cranes to deer, geese and a

growing number of songbirds are more abundant. We are still at an early stage in the restoration process, but are excited about what the future holds.

Reducing our carbon footprint.

We decided to install solar photovoltaic panels in 2014 and completed the project in time to turn them on at Christmas time that year. Our decision to invest in PV was a long time in coming. The technology had caught our attention back in the 1980s, but only recently became affordable.

Our system consists of 20 solar panels, a stand to mount them, controllers and wire. The whole system cost us $14,186 before the 30% federal income tax credit. We saved a lot of money constructing the mounting structure and assembling the components ourselves. We had great help with designing and building our system by working with a company out of California that specializes in Do-It-Yourself solar.

The system has operated without any input from us since the beginning (Shoveling snow has been our only maintenance). It has produced well over 50 megawatts of power since commissioning, meeting over 95% of our total electrical needs.

Everyone wants to know about payback: When does solar pay for itself? That is a question that can be answered numerous ways. We will look at our cost after taking the federal tax credit, which made it just under $10,000. Average home electricity costs in our region is 12.8¢ per kilowatt hour. The average home uses over 800 kilowatt hours each month. Our home uses about a third less than that on average.

I am a businessman and look at the cost of solar like this: It cost us about $10,000 and is warranted for 25 years. That is equal to $400 a year, or about $34 a month. From that calculation, my system has made money every month since I turned it on. It is likely to last more than 25 years, albeit with somewhat reduced output. At that point everything it produces is pure profit.

However, we had a more important calculation. We believe in the science of climate change. We have grandchildren. When they ask us why we didn't do something about the climate, we will tell them about many things, including Clean Water Action Council. We have tried to live mindfully and effect societal change with our lifestyle, our voting and our donations. Having solar power seemed to be a responsible thing for us to do.

Chris and Dave Kellems remodeled with sustainability in mind.

By John Hermanson

Editor's note: We are pleased to have Chris and Dave as members since 2019.

The Kellems of Sturgeon Bay know what they're talking about when they describe themselves as living sustainably. Their identity as good planet stewards is backed by the Leadership in Energy and Environmental Design (LEED) Platinum home award they received. Dave proudly flicked on a switch to show me their backlit placard award.

Chris's father, Adam Kreuter, at 98 years of age turned over his owner-built home to the Kellems in 2013. It was hard to break the news to him that they realized they needed to do an extensive remodeling after Virge Temme, their architect, told them the walls would not safely carry the weight of a new roof. They managed to show Adam the home's plan that eventually included recycling 95% of materials.

Adam's hand-built doors and cabinetry along with many beams and boards were incorporated into the new home honoring he and his wife's legacy. He passed away August 1, 2014. A couple months before this Chris and Dave had signed an agreement with Ahnapee Construction of Algoma to begin work on the house.

Guided by Virge Temme and the LEED green building rating system that provides a framework for healthy, highly efficient, and cost-saving buildings, the Kellems created a home where they plan to spend the rest of their lives. The Kellems had some background that helped them prepare for this "green remodeling." Dave was an electrical engineer and Chris was an experienced painter. She also took a course in sustainable living and spent a lot of time at construction sites.

LEED awards are based on points garnered for measurable categories including:

1. Innovation & Design Process – having four meetings with all involved in constructing their home thereby creating a commitment to collaboration and accountability, and creating a handicap level on the 1st floor with a master bedroom, bath, and kitchen appliances, and use of energy modeling to maximize savings while balancing other objectives (they figured triple-pane window costs were better spent on other home improvements since they would only save 1% in energy use)
2. Sustainable Site – showing resilient design having a concrete slab on 43 pilings to bedrock (they are on the water and built on sand), lot contains edible landscape for humans and beneficial bugs and allows habitat for turtles to build nesting sites
3. Water Efficiency – including on-demand water heater, Water Boss 950 soft water unit and 1,000-gallon rainwater recovery system for their landscape
4. Materials & Resources – including repurposed kitchen cabinets, beams, stairs, and doors along with raising the home's site with appropriate fill from the old home
5. Indoor Environmental Quality – with low VOC paint, finishes, and 2nd level bamboo flooring
6. Awareness & Education – having participated in many Wisconsin Solar Tours and with Climate Change Coalition of Door County and teaching courses on Advanced Framing at NWTC
7. Energy Efficiency – including 38-panel, 9.5 kWh electrical solar system, insulation, R35 floor, R45 walls, R55 Ceiling/rook, double-pane windows with roof overhang, 97% efficient heating, cooling and humidity control, and a 90% Energy Recovery Ventilation system.

The Kellems explained that the cost of an energy-efficient home is 2-3% more than building a conventional home. Their home is 68% more efficient in energy savings than a standard built home. They showed how their solar system that cost $20,000 has a payback period of 17.2 years, but by using their electric car, they bring down the payback period to 10.8 years. The payback period is significantly less with new, more efficient, and less costly solar panels available today.

Wisconsin Uniform Building Codes, lenders, appraisers and builders have shown resistance or have been uninformed in recognizing and valuing high performance buildings.

There is plenty of blame to go around including state and federal governments' weak policies, Builders Associations encouraging old minimum standards, and of course the fossil fuel industry.

A bright spot is the recent Wisconsin's Governor's Taskforce on Climate Change and a July 2021 meeting held in Sturgeon Bay. The meeting was convened by architect Virge Temme and others, bringing together state leaders of insurance, lending, and building codes. The goal was to show what sustainable and resilient buildings look like and how they can be supported. Debra Fitzgerald from *The Peninsula Pulse* wrote a related article, "Building for a Changing Climate."

The Kellems' home was one that was featured on this one-day gathering. They explained during the tour that their electric, gas, water, sewer, and refuse services cost an average of $69.11 a month. A goal for all of us should be to tell our children and grandchildren we did something about the climate emergency. And in the case of the Kellems, a home that demonstrates their commitment to mitigating climate change.

The Hoeggers, guardians of a small plot of land.

By Maya Hearden

CWAC President and Executive Director, Dean Hoegger, lives with his wife Julie in Southern Door County. The two of them practice sustainability in their everyday lives, as well as in the infrastructure and maintenance of their property.

One of Dean's early influencers include his grandparents. They taught him the importance of raising and putting up food. He was also influenced by the books *The Unsettling of America* by Wendell Berry, and *The Good Life* by Helen and Scott Nearing.

Dean and Julie have an extensive organic garden on their 3 ½ acres where they produce enough food for putting up and giving away. They also have a small orchard and vineyard. Their orchard has three kinds of apples trees, cherries, and pears. Their vineyard has concord grapes, red grapes, and green grapes. They make their own juice, wine, jelly, and applesauce with the fruits they grow. They invite CWAC members to pick grapes in mid-September and to sample their wines and jelly

By growing their own organic food to keep and give away, Dean and Julie are reducing the amount of harmful chemicals polluting our environment and waterways.

Dean and Julie compost all their food waste for use on their garden. Not only does this help the garden thrive, but it also reduces landfill waste and decreases greenhouse gas emissions. When food breaks down anaerobically (without oxygen) it produces methane, which can escape landfills and accumulate in the atmosphere.

In addition to their gardening efforts, the Hoegger's have planted over 1,500 trees on their property, many of them rescued from construction sites. This number of trees has a tremendous impact on reducing carbon dioxide

over time. In one year, a mature tree will absorb more than 48 pounds of carbon dioxide from the atmosphere and release oxygen in exchange (U.S. Department of Agriculture).


Milkweed

Compared to their neighbors. Dean and Julie also mow a minimum amount of grass. Mowing less allows native grasses and wildflowers to grow, such as milkweed, increasing the nectar for pollinators. It also decreases emissions from gas-powered mowers and other lawn equipment that contribute to air pollution.

The Hoeggers collect and use energy from a 12-amp, 3000-watt solar collector. They try to use their high electric-consuming appliances during the day while the sun is shining. By doing this, they have cut their energy consumption by 50 percent. However, their bill was only cut by one-third since WPS initiated a roughly $20 minimum monthly charge and reduced the credit for putting electric back into the grid.

Dean and Julie live a more sustainable life because of a desire to reduce their impact on the earth and impact on climate change. Their primary vehicle is a Prius that they use for commuting and long trips. They believe it's important to have as little impact on the earth and climate as possible and want to set an example of sustainable living for their children, grandchildren, family, friends, and neighbors.

"It's all about building up the soil and putting carbon back into it, leaving the land healthier for the next generation,"

- Dean states

With his work for Clean Water Action Council, Dean promotes and educates members, and the public, about sustainable practices. Prior to CWAC he was an elementary school teacher where he was able to promote outdoor and environmental education, helping children develop a strong environmental ethic.

Dean's advice to someone who wants to begin their own search for sustainability is to start small with something easy to do that could become a habit. He suggested composting food waste, driving an energy efficient or electric car, growing your own food, or buying from local farms and vendors.

Dean and Julie are committed to living a sustainable life and hope to continue their gardening, plant more trees, and add another solar collector in the future.

John Hippensteel promotes sustainability by promoting clean energy.

By Maya Hearden, Summer Intern

John Hippensteel is a longtime member of Clean Water Action Council whose career is demonstrating and promoting clean energy. He is a solar energy instructor at Northeast Wisconsin Technical College (NWTC) and president of Lake Michigan Wind and Sun (LMWS).

John's work at Lake Michigan Wind and Sun includes designing and installing renewable solar and wind energy systems. Some of John's customers include Chris and Dave Kellems, and Dean and Julie Hoegger; he designed and installed the solar system at their homes. John has several solar arrays and some wind turbines at his home in Sturgeon Bay. John also drives an electric car that runs on sun and wind energy.

John noted that he has not paid an electric bill for at least 15 years because he produces enough energy for what he needs. This is in part due to the fact that he uses his home to test wind turbines and solar arrays to determine their reliability, and the reliability of solar tracking technology. He does this to ensure customers get the best products on the market.

Although most of John's time is spent training the next generation of solar installers at NWTC, he also educates the public about the importance of clean energy through his work at LMWS. Their big event is the National Solar Tour of Homes, which is the first Saturday in October. John opens his farm to show people the equipment he's installed. People also participate in Learning in Retirement seminars, which are organized through the University of Wisconsin Extension office.

John feels that the one rewarding part of his work is the satisfaction of seeing other people committing themselves to reducing their electric consumption and getting the most out of their solar array

He finds his work in education to be the most rewarding. "Nothing beats training the next generation of young enthusiastic students that want to make a difference in the world. They want to be there, and they want to learn. It's a blast." John declared. "To see the solar arrays go up and see the students learning, you can't ask for a better [reward] than that."

John's advice to someone who wants to switch to renewable energy is to investigate having a solar system installed or installing one yourself, especially if you have a good solar window. He explained that prices are a fraction of what they used to be.

If you are not able to install a system, John suggests you sign up for a program that allows you to buy clean renewable energy. Wisconsin Public Service has a program called NatureWise Renewable Energy Program[1]. Through this program you can buy 100 kWh "blocks" of energy that come from wind and biogas sources. Each "block" costs an additional $2.40 and amounts for roughly 15-20% of your energy consumption. It's a very simple process and it's something you can do today without having to install equipment.

Even though much of his life is dedicated to clean energy, John feels that it is just part of the solution to maintain the planet. In addition to his renewable energy usage, John has upgraded his over 100-year-old farmhouse over the years to make it more energy efficient. He also has a 40-acre farm that has been converted to organic. On his farm he has a beehive, as well as monarchs and milkweed, and he's in the process of establishing a pollinator habitat.

John is a registered professional engineer but feels that he's really an artist by heart. He likes to design aesthetically pleasing systems and incorporate artwork into the systems he designs. He is truly passionate about the work he does and wants to continue that work for as long as he's able.

The website for LMWS is http://www.solar-flairs.net/

[1] For more information on the NatureWise Energy Program visit: NatureWise® Renewable Energy Program|Wisconsin Public Service

Sustainability Briefs

Reports from CWAC members.

Growing microgreens where they will be eaten.

By John Hermanson, Board Member

Part of my attempt to be more sustainable includes growing microgreens. I have been growing them for the last couple years year-round using LED shop lights in my basement.

While there are various ways to go about it, I use two four-foot LED lights for every four growing trays. In writing this article I was prompted to find out what others could tell me about the sustainability of this activity. A good and interesting resource is, *Are Growing Micro Greens Sustainable? Grocycle* on YouTube. The two presenters were Brits, and their accents were novel and authoritative sounding which made the experience all the better. Their calculations showed that a day's worth of running a refrigerator was enough electricity to grow over two pounds of microgreens.

With 40% of food grown being wasted, the efficiency of having seed sent to where food is to be grown and eaten and a nutrient density of four to forty times that of mature vegetables, supports why individuals would consider growing microgreens.

How can I improve on making my endeavor more sustainable? I could install a solar collector to produce my own electricity, or I could advocate for more renewables on my electrical grid, and I could use less or no peat moss in my growing mix.

Please note this is a fun and rewarding activity not to mention how good tasting and colorful they can be on their own or as part of a larger salad. You can learn to grow microgreens from multiple sources including a brief introduction at https://fyi.extension.wisc.edu/wwhort/files/2016/01/Microgreens-Info.pdf

The Frisk Family Environmental Footprint

By Charlie Frisk, Board Member

Kathy and I do some things very well in regard to reducing our environmental drag on this world we live in, other things not so well.

On the positive side:

- We have converted about 1/3 of our yard to native prairie plants. We have greatly increased the populations of bees, butterflies and hummingbirds using our yard.
- We compost all our food waste that is possible to compost. If you are thinking of starting composting, contact Dean for a compost bin. The compost bins that CWAC are selling are a superb design.
- Our recreation is almost entirely non-motorized, cross-country skiing, snowshoeing, birdwatching, canoeing, hiking and biking. Yes, in many cases we burn fossil fuels

to get to where we play, but once there we're not burning fossil fuels.

- We recycle religiously and pick up every piece of garbage we see while hiking.
- We belong to, and support financially, many environmental groups, both local and national. Possibly the most important of these groups is the CWAC.
- We contact state and national politicians on important environmental issues, and write letters to the editor of local newspapers on those issues.
- We purchase most of our meat from organic, grass-fed producers.

On the negative side:

- We live in too big of house. We have a 2-story, 4-bedroom house, we could live in a house half that size. Larger houses use more fossil fuels.
- We drive cars that are too large. We have a Chrysler mini-van and a Subaru Outback. In the near future we should switch to an all-electric car.
- We drive too many miles. One of my daughters and two of my brothers walk or bike to work every day and do almost all their shopping with a bike and one of those pull behind kid carriers.
- We eat too much meat. The failure to regulate pollution from industrialized beef, swine, poultry and dairy facilities is devastating rivers, lakes and oceans and contributing to global climate change.

Improving the environment by reducing plastic waste.

By Jim Wagner, Board Member

Plastic waste is a bane to our environment – from the landfills to the ocean bottoms it pollutes – and such a huge problem that individual efforts seem a waste of effort. I wanted to do something, anything, to make a difference when I joined CWAC as an intern in 2014, so the first thing I did was buy four cotton, reusable bags our organization sells, and swear off plastic single-use grocery bags.

It's something that has been baked into my lifestyle now and the effort to make the switch was negligible. Recently, I did some back-of-the-napkins calculations to see what kind of effect I was making: one shopping bag weighs 5 grams and I, on average, shop at stores and accumulate 10 bags in that week (double-bagging at the grocery store for the family will put you at much more in one day). Over the course of a year, I've removed 5.73 pounds of plastic from the environment. Since I've started in 2014, that's 40 pounds (The math: 5g x 10 x 52 x 7 = 18,200 grams or 40 pounds). In 2015, wanting to do just a little bit more, I banned plastic water bottles in the house. I bought a 5-gallon jug, a Brita water filter, and I'm my own safer water-producing residence. One 16.9 oz bottle weighs 500 grams. Using the above 10-bottle average, that comes out to 344 pounds over six years.

So, what kind of difference does my individual effort make on our planet? Well, truthfully, not too much. But the power of movements, and comprehensive environmental reform through our state and national legislatures, can change that. Currently, eight states ban single-use plastics, of which Wisconsin is not one. Think of the relief to our landfills and oceans if the people of Wisconsin – current population 5.89 million – took the same, miniscule effort as I to reduce plastic use? About 12.3 billion pounds.

And if you've haven't already, I highly recommend viewing the documentary, "The Story of Plastic" from the Story of Stuff Project, that you can watch here: https://www.storyofstuff.org/movies/the-story-of-plastic-documentary-film/

Seeking Sustainability When Dining Out

By Andy Wallander

An estimated 43 billion pounds of food were wasted in American supermarkets and restaurants in 2010. With that said, in 2016, 12.3% of American households were food insecure. Food insecurity is defined as the disruption of food intake or eating patterns because of lack of money and other resources.

Buffet-style restaurants have higher levels of food waste. Photo courtesy of "All You Can Eat Restaurants in Chicago - Best Buffets in the 312"

Most of the food waste occurs in American retail food businesses, such as supermarkets and restaurants consist of perishables, including baked goods, produce, meat, seafood, and prepared meals. The U.S. Department of Agriculture estimates that supermarkets alone lose $15 billion per year in unsold fruit and vegetables alone. However, wasteful practices in these businesses are often viewed as "good" business practices.

Some of the main examples of food waste at supermarkets include: overstocked product displays; customer expectations of "perfect" looking fruits, vegetables and other foods; oversized packaging; the easy availability of prepared food right up until "closing time;" expired "sell by" dates; damaged products; unpurchased seasonal items; over-purchase of food products; and under staffing.

Losses and waste in American restaurants, both full-service and fast food, are estimated to generate 22 billion to 33 billion pounds of food

waste annually. Also, institutions such as universities, schools, hotels, health care facilities, and other sites with cafeterias or catering services generate an additional 7 billion to 11 billion pounds of waste per year. All told, these establishments generate two to four times the waste of supermarkets, retail supercenters, and wholesale food distributors combined.

Too many choices on the menu can make it difficult to maintain proper inventory management since large menus require more ingredients on hand. All-you-can-eat and buffet-style restaurants tend to have higher levels of pre-consumer waste than full-service restaurants, where food is largely made to order and overproduction can be more readily avoided.

Franchise chain-restaurant management can make it harder to control waste because their individual restaurants often lack adequate flexibility to use surplus food creatively. Fast food restaurants and drive-throughs must often adhere to strict time limits for prepared items. For example, one major chain has a policy that unsold French fries must be thrown out after 7 minutes and hamburgers after 20 minutes.

Post-consumer waste, material discarded after someone purchases it, often makes up the majority of total food losses and waste in many restaurant settings, specifically those where there is little on-site food preparation. Post-consumer wastes can be caused by excessive portion sizes and service methods such as all-you-can-eat buffets, free unlimited drink refills, the automatic inclusion of bread products, side dishes, and other items that consumers may not want.

Portion sizes have increased significantly over the past 30 years. The average, pizza slices grew by 70 percent in calories, the average chicken Caesar salad doubled in calories, and the average chocolate chip cookie quadrupled. Today, portion sizes can be 2-8 times larger than recommended healthy standard serving sizes. This practice negatively affects both how much customers consume and how much goes uneaten. Of course, if restaurant patrons don't finish their portions, they can take them home. However, on average, diners leave 17% of their meals uneaten, and 55%of these leftovers stay on the table.

When looking over a restaurant's in-person or online menu items, be mindful of the establishment's location. If you're in a landlocked place and ocean fish is one of the offerings, it's not local fish. In Wisconsin in February, the asparagus dish is not in season.

Does the restaurant have a philosophy that includes local seasonal items that change with the seasons? Or do they offer the same dishes year-round? Does the menu mention the food's origins, or specific local farms they partner with or buy from regularly?

Ask "Where do you source your meat?" or "What farms do you buy from?" or "Is this dish in season?" The server might not know but could find out from the chef or manager.

You can also look for information about, or ask about, their businesses' handling of food wastes. For example, do they compost?

Some suggestions for reducing food and packaging waste when dining out include:

- Say "no" to the all-you-can-eat buffet
- If food portions are very large, consider splitting an appetizer or entree with your dining partner
- Ask for a "doggie bag" to go, and eat your leftovers later at home (consider bringing your own reusable "doggie" container)

When using a take-out or drive-through service consider:

- Bringing along your own washable straw, so you can say "no" to straws
- Bringing your own reusable coffee/beverage cup from home
- Say "no" to plastic bags
- Bring your own reusable silverware and extra napkins from home
- Consider bringing your own reusable container and asking if the restaurant will use it for leftovers
- Say "no" to extra condiments; keep a big bottle in your refrigerator instead

Additional Resources:
https://foodprint.org/

https://www.todaysdietitian.com/newarchives/072710p46.shtml

https://www.nrdc.org/experts/andrea-spacht/report-wasted

Editor's note:
Mighty Wind Farms, owned and operated by Dan and Char Fatke and son Tay, located in Sister Bay, is accepting both domestic and restaurant food waste. Call them at 262-305-0623 or message them on Facebook for more details.

The Top 7 Ways to Reduce Your Carbon Footprint and Move Towards Sustainable Living

By Carol Pearson

1. Be aware of packaging when shopping. Unnecessary packaging is producing growing piles of garbage. Remember, it costs valuable oil and electricity to make the cardboard and plastic used to package your products. Look for products with the least amount of packaging and those that are in packages that can be recycled. Bring reusable bags to transport your purchases home. Purchasing items online is convenient but come with more packaging than the same item purchased locally.

2. Shop, buy, and eat local. Every item you purchase has been transported to the site of sale. This transportation requires a large amount of human power, logistics, and energy. Support your local economy by buying local and reduce gas consumption and emissions by reducing the energy required. A large amount of our natural resources such as habitats and water are wasted in raising livestock and crop farming. Be purposeful in what you choose to eat and where it comes from. Select locally grown, seasonal produce rather than produce out of season flown halfway around the world. Cut back on the amount of meat you consume and replace with vegetarian selections.

3. Eliminate Plastics. Eliminating as much plastic as possible in your life and home will make one of the most significant changes toward sustainability. Very little of the plastic made decomposes naturally. Try to purchase items in plastic that can be recycled. Make sure to recycle the plastic and not toss in the trash. Purchase and store food items in metal or glass containers that can be recycled. Avoid single use plastic such as water bottles, straws and plastic bags as much as possible.

4. Conserve water and reduce water consumption. The world's increasing population is leading to increasing demands on water sources. Here are some things you can do around your home to conserve water. Switching to a water-conserving toilet can save up to 4,000 gallons of water a year. Create a drought-tolerant landscape around your home. Install a rain barrel and use the collected water to water your plantings or lawn. Immediately fix leaky faucets and toilets. Purchase green energy or low-water dishwashers and washing machines and use the Eco setting. Run your appliances during off-peak hours. Install low flow shower heads and take shorter showers.

5. Compost your kitchen scraps and yard waste. Composting helps reduce the amount of waste going to local landfills. By composting, you repurpose the waste into nutrient-rich green energy to fertilize your garden, both flower and vegetable, and even indoor plants. Remember you can compost shredded paper along with your kitchen scraps, grass clippings, and leaves. (See CWAC's food waste compost workshop and low-cost composters on page 16)

6. Be aware of your indoor air quality and create a greener home. When refurbishing or renovating your home, avoid the use of volatile organic compounds (VOC). VOCs are found in things like plastics, chemicals like flame retardants, carpet and floor covering especially in the glue and backing - and paints and finishes. Avoiding products that contain them or removing existing materials that contain them will improve your indoor air quality. Installing adequate sustainable insulation, programmable thermostats, eco-friendly lightbulbs, and energy efficient windows will create an energy efficient home and reduce your carbon footprint. You could go even one step farther and install solar panels and reduce your footprint and utility bills even more.

7. Consider your driving habits. The quickest way to be greener would be to ride a bicycle or take public transportation. But for most of us, a car is a necessity. If you can afford it, switch to a more fuel-efficient car such as a hybrid or electric car. For the rest of us, you can be greener by grouping your errands to have a route with the fewest stops. Consider carpooling to work or school. Buy the vehicle that best fits your needs. The larger the vehicle, the higher its emissions. Large vehicles produce 11 million tons of carbon dioxide a year while idling. You can reduce your vehicle's emissions by reducing your engine idling time. If you must wait longer than a minute or two in traffic, turn off your car. Avoid commuting during heavy traffic to reduce your engine's idling time.

The Action in Clean Water Action Council

By Dean Hoegger, CWAC president

Thank you to the many members who already renewed in 2021. Those renewals are "keeping our doors open" until our fall banquet fundraiser on Thursday, October 7. Please use the enclosed order form to purchase your tickets today or go to:
https://www.cleanwateractioncouncil.org/events/

Have you renewed for 2021? To check your membership status, look at this newsletter label which shows your last renewal year. Emailed newsletters include the last renewal year in the body of the email. Membership donations provide funding for most of our operations, and we also offer the opportunity to sponsor a newsletter or an intern, beginning at the $250 level.

You can mail your membership donation or join CWAC with the enclosed form, or go online to http://www.cleanwateractioncouncil.org/membership/.

Read below about the actions we have taken in the last three months.

Be sure to contact us if an environmental issue arises in your community. CWAC is here to support citizen action.

Legal Actions

As a citizen organization, an important function of CWAC is to take legal actions on behalf of our members to protect human health and the environment. Because individual members may be reluctant or unfamiliar with how to file a legal action, the CWAC Board of Directors believes that taking legal action on behalf of our members is an important part of our mission. Here are some current legal actions and our efforts to improve environmental laws.

CWAC Seeks to Intervene in the WMC vs WDNR Waukesha Circuit Court Case

On June 14th, CWAC, together with several other

organizations and one individual filed for intervener status in a Waukesha County circuit court case. Wisconsin Manufacturers and Commerce, along with an Oconomowoc leather-cleaning business is suing the Wisconsin Department of Natural Resources (DNR) over the agency's authority to clean up toxic chemicals such as PFAS. We believe the WMC brought the suit to limit the DNR's ability to investigate and remediate environmental contamination under the Spills Law.

At risk in this case is the DNR's broad authority under the Spills Law, which gives the Department the flexibility to address the spill of any substance that poses a hazard to public health or the environment as the need arises.

Foam products used by firefighters contain PFAS. (Photo courtesy of U.S. Department of Health and Human Services)

Members of CWAC and residents of northeast Wisconsin are directly impacted by the DNR's ability to regulate hazardous contamination under the Spills Law. For example, the DNR's authority is needed to protect Marinette residents from the extensive PFAS contamination created by Tyco Fire Products at their fire-fighting foam testing center.

In a related recent case, an unfavorable settlement between the DNR and the WMC prevents the DNR from releasing the PFAS sampling results to the public. It is outrageous that this information is kept secret. Residents have a need and a right to know if PFAS is found in their community. Therefore, we are seeking intervenor status in the Waukesha case. Intervenors are granted full party status, which means we can accept or reject a proposed settlement to protect the public's interest.

Midwest Environmental Advocates is representing our group in the case. As a member of this group, CWAC will be fundraising for some of the legal costs, which will depend on the course this case takes. Contact us if you would like to contribute.

On September 17, the court will hear our motion to intervene.

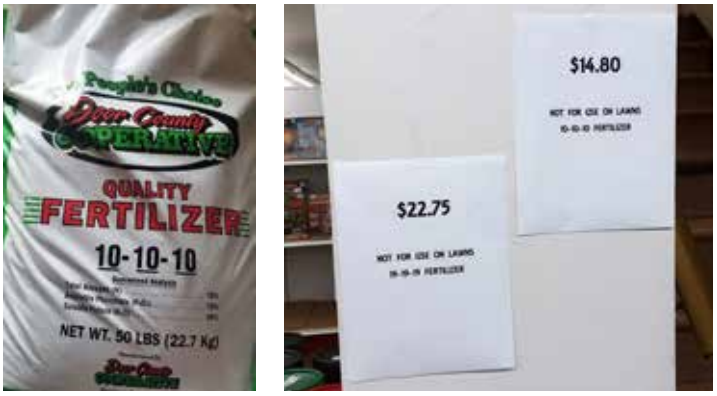
Monitoring for Fertilizer with Phosphorus Sales.

Due to a long history of phosphorus in fertilizer violations at Door County Cooperative locations, paralegal intern Maya Hearden used her legal writing skills to prepare a violation notice letter, which was mailed to the cooperative's board members. This resulted in the cooperative posting a notice next to fertilizer displays at two or more of their locations.

However, this was a modest attempt at compliance as the notices were printed on photocopy paper, not laminated, and in one case placed in a very windy location. Continued monitoring will be needed this fall when lawn fertilizer purchases increase.

Phosphorus is known to be a major contributor to algal blooms in inland waters and the Great Lakes. Phosphorus in lawn fertilizer can be a major component in urban runoff if the law is ignored. Therefore, we monitor it each year.

If you send photos of violations you observe, we will contact the business.



Fertilizer with phosphorus on display to the public, but now with signage at Door County Cooperative True Value Hardware store in Algoma.

CWAC Monitors for Plowing Violations.

The plowing or cultivation setback is only five feet from a stream bank, a very modest distance. Yet violations do occur which create a greater risk of soil and nutrients entering the watershed and finding their way to Green Bay and Lake Michigan. **Contact us if you observe a suspected violation.** Fall traditionally is a time when plowing again occurs. By reporting previous violations, we helped bring about 35' conservation easements at three locations, which provided significant protection to those waterways.

We will be monitoring again this fall and likely with the assistance of a drone.

CWAC Commented on Pollution Permits, Sent Letters to Government Officials and Elected Representatives

We monitor notices for new water pollution permits and renewals, especially regarding requests for variances. Variances are usually requested when the polluter is not meeting the requirements of the current permit. We published the notices for Northeast Wisconsin in our Weekly Update. At times, we attend hearings and/or submit comments. Midwest Environmental Advocates helped us with comments to the DNR about updates to the non-metallic mining general permit requirements.

Please monitor the emailed Weekly Update for permit renewals, variances, and hearings for rule changes. Previously approved variances have included much higher levels of pollutants, often at prior exceedance levels.

We submitted Freedom of Information Act (FOIA) requests to the DNR regarding pathogen testing results at Dairy Dreams, a CAFO in Kewaunee County, to determine the accuracy of owner Don Niles' claims about pathogen reduction. At the time of this writing, the information has

not been received. At the request of a member, we also submitted a FOIA request to the Wisconsin Department of Health Services for a copy of Wisconsin water utility records for information about the level of fluoride in the water of both fluoridated and non-fluoridated communities. They provided this link: https://dnr.wisconsin.gov/topic/DrinkingWater/QualityData.html However, the information is not as available as what was previously posted as reported to the CDC and then listed on the department's website.

PAH and Coal Tar Sealant Ban

Coal tar-based sealant for asphalt pavement is known to be a serious health threat because it contains polycyclic aromatic hydrocarbons or PAHs. According to the Army Corps of Engineers, children living near surfaces treated with this sealant have a 13-fold increased risk of developing certain cancers and a lifetime exposure can result in a 38-fold higher risk of cancer.

So, you can imagine my outrage when at a legislative hearing a representative from a sealing company claimed he observed no problems with the sealant and used it regularly on school playgrounds. He claimed a ban on the product would put him out of business. Yet, the state of Minnesota has banned sealants with PAHs for many years, and there is no lack of companies applying safer sealants such as those made from asphalt or latex. Be sure your school, church, or business insists on these safer sealants.

Legislation to ban this dangerous sealant will not be passed by the legislature this year. It becomes imperative that we act on a local level to get ordinances passed to protect our children in schools, daycare centers, churches, and apartment complexes just as Green Bay, De Pere, Sturgeon Bay, and other communities along the lakeshore have already done. Contact us to help get a ban passed in your community.

Click this link for a slide presentation on the topic: https://www.youtube.com/watch?v=0xjvi-leDHg&feature=youtu.be

Children risk exposure to PAH chemicals when playing on asphalt treated with coal tar pavement sealant. Children living near surfaces treated with this sealant have a 13-fold increased risk of developing certain cancers.

CWAC Promotes Ordinances to Ban Manure Spraying.

We have not provided presentations on this concern recently, yet the threat remains. Thus far, at least 17 Northeast Wisconsin towns and cities have passed a ban. If your town has not passed an ordinance, contact us to help get a ban and protect your family from this health threat.

For more information on this concern, go to our website for Priority Issues: "Ban Manure Spraying." http://www.cleanwateractioncouncil.org/issues/spray-irrigation/.

The Petition to the EPA for Corrective Action for Administration of the Clean Water Act

The petition was first filed with the Environmental Protection Agency in 2011. Two CWAC board members are petitioners to correct 75 deficiencies regarding the way Wisconsin administered the CWA. Our paralegal interns assisted Midwest Environmental Advocates this summer by reviewing the status of the petition in preparation for future meetings with the EPA.

Water Sampling

For the fifth consecutive year, CWAC continues to participate in the DNR's Lower Fox River water sampling program with the fourth year of water sampling and stream assessments for Baird Creek on Green Bay's east side.

Educational Efforts in the Community

Food Waste Composting Education

15 people attended the Sturgeon Bay workshop in July to learn about composting and purchase composters at our cost of $54. We also made home deliveries of composters with setup and instruction. Thus far, 52 composters have been distributed for composting food waste. Another workshop will be held on September 16 in Green Bay. See the quarter-page poster in this newsletter. Contact us if you would like to host a presentation or purchase a composter. Only 14 remain.

Newsletter Outreach

The spring newsletter, Endocrine Disrupting Chemicals. What you need to know to protect your family was sent to 550 members in June. There are limited printed copies remaining should you want to distribute them to a group or organization. All newsletters are available on our website at: https://www.cleanwateractioncouncil.org/newsletter/

Get Our Weekly Update by Email

Each Tuesday we email the CWAC Weekly Update with actions, alerts, events, and the latest information on topics of concern. Send your postings by Monday evening. If you are a member with an email address and you are not getting the CWAC Weekly Update, check your spam folder before emailing us to request to be put on the mailing list. If you are a member and getting more than one Update, let us know and we will fix that.

If you are reading this newsletter as a non-member, email us at contact@cleanwateractioncouncil.org to be placed on the free Weekly Update list. Emails are sent via BCC to protect your privacy.

Again, not receiving the Update. Send us an email request. It is sent out once a week via BCC email.

Health Forums

In August, we held the health forum, Protecting your family from toxic air exposure in the home with Air Inspector Martine Davis.

Contact us if you have suggestions for topics or speakers. **We are seeking business or member sponsors for individual health forums at the $200 level, either full or in part.**

Efforts to Stop the Back 40 Mine

We will continue to use the concept of social license to stop the Back 40 Mine, which is now more important than ever. With their wetlands permit not approved, Aquila Resources will be submitting a new plan. Opposition must be increased. Learn more about the threat from this mine from Dr. Al Gedicks at: https://www.youtube.com/watch?v=cilsGzrf1-g

Presentations and Exhibits

On September 14, at UW-Green Bay, we will present to Lifelong Learning Institute members the current efforts to protect ground and surface waters and the most significant threats to our waters. We hope to be doing more in-person exhibiting this fall and winter.

We have presentations on our website via YouTube. One is The Threat from Micro-plastics in Clothing. Another is The Hazards of Coal Tar Pavement Sealants. They can be found at https://www.cleanwateractioncouncil.org/resources/

Here is a list of current presentations that can be given in-person or via Zoom. The presentations can be tailored to your group's geographic location, age, and available time. Also, contact us if you would like us to promote or co-sponsor your event or presentation.

- Citizen Action to Protect the Waters of Northeast Wisconsin
- Communities on the Road to Zero Waste
- The Health Hazards of Burn Barrels
- The Health and Quality of Life Hazards from Manure Spraying
- The Health Threat from Coal Tar Pavement Sealants
- Micro-plastic Pollution from Clothing

Outreach through Newspaper and Radio

CWAC sends press releases to local media, and we are often contacted to comment on developing environmental issues.

Website Updates

Past newsletter issues can be found at the website as well as updated articles and additional resources at www.cleanwateractioncouncil.org

CWAC Provides Interns with Valuable Experiences.

We provide our interns with valuable experiences and strategies for managing a non-profit organization. We invite them to attend area conferences and meetings, provide them with networking opportunities in environmental fields, encourage them to research and write for our newsletter and website, invite them to attend board meetings, and represent CWAC at meetings with partner organizations. We are currently accepting spring semester internship applications.

We are thankful for the 2021 and 2022 intern sponsorships by Marge and Ken Bukowski. Contact us if you would like to learn more about sponsoring a student intern.

Attendance at Conferences and Meetings with Other Environmental Groups

We attend biweekly meetings with the No Back 40 Mine group, monthly meetings with directors of other state environmental groups, and as issues arise, we attend strategy meetings to address the issue.

CWAC's Non-Profit Status

To learn more about our non-profit status and financials, go to the Wisconsin Department of Financial Institutions, Credential Lookup, and then go to Credential Search for Clean Water Action Council.

Citizen Complaints

Many of our more extensive actions, some requiring legal work, resulted from a follow-up of citizen complaints. Keep us in mind if you have an environmental concern for which you need support.

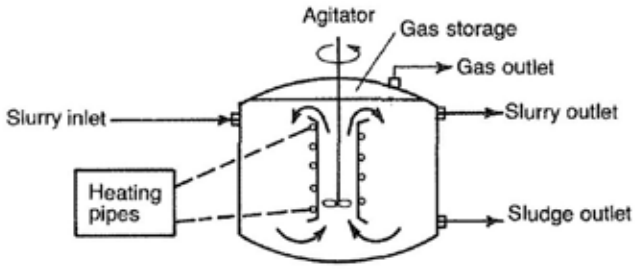
Please follow us on Facebook.
Click here for our page: ***Facebook***

Anaerobic Manure Digesters. Are they a solution to pollution?

By Carl Woitekaitis, Summer Intern

Northeast Wisconsin is home to twelve anaerobic manure digesters. This means that the manure is processed in an oxygen free environment. In June ground was broken on what will be the largest digestor in the United States. Brown County Organics is expected to process more than 360 million gallons of manure per year.

You may be wondering what a manure digestor is. In short, a digestor is a large tank that collects manure (dairy, pig, chicken) and then is heated and typical stirred. Liquids and solids are separated during the process. The solids are often used for livestock bedding. The liquids are transported to a lagoon, and then later spread on farm fields.



The basic parts to a anaerobic manure digester.
Courtesy of Penn State Extension.

The digesters use anaerobic digestion which is a process through which bacteria break down animal manure in the absence of oxygen. This creates methane which is piped out for use on site or sold. Some local digestors sell their gas to energy companies like Wisconsin Public Service.

The benefits of anaerobic digestions are not to be scoffed at, according to the Environmental Protection Agency, in 2020 alone manure-based anaerobic digestors were responsible for reducing greenhouse gases by 5 million metric tons of CO^2 throughout the country. That is equivalent to CO^2 emissions from over 560 million gallons of gasoline being burned. Clearly these numbers are significant and should be applauded. But digestors are not the panacea that some would contend.

The digestion process of manure alone does not create environmentally friendly by-products. The Brown County Organics plan includes remediation of the effluents that will then be released into local waterways. This means that the post digested effluents will be treated to remove harmful pathogens and released into local waterways.

Phosphorous and nitrogen are not removed during the digestion process. When proper manure management is not used, these nutrients can runoff and cause environmental havoc. Phosphorous is known to cause deadly algae blooms in bodies of water. Nitrogen is linked to groundwater contamination. These two nutrients are a particular problem in Northeast Wisconsin where ground water contamination has been an ongoing concern. Excess nutrients are not the only problem with manure spreading.

A June 2021 study makes the claim that three-quarters of gastrointestinal illness in Kewaunee Country are linked to cow manure. In a separate study USDA microbiologist Mark Borchardt found nitrate and coliform contamination was linked to Kewaunee County farms.

Wisconsin has passed new administrative rules, NR 151, regulating how and when manure spreading should be done to prevent contamination. Certain farms are required to register nutrient management plans with the Department of Agricultural, Trade, and Consumer Protection (DATCP). DATCP says that about 70% of those farms who have nutrient management plans comply. Despite these plans, some experts contend that the regulations are not strict enough.

However, In the WPR article *Cow Manure Predicted to Cause Most Sickness from Contaminated Wells in Kewaunee County*, Don Niles, owner of Dairy Dreams, LLC stated, "We have to demonstrate that we've destroyed 999 organisms out of 1,000 (before land spreading the manure)." This statement, claiming there is a need to destroy the equivalent of 99.9% of organisms, does not specify whether Niles is speaking of harmful pathogens or simply organisms, and to whom must he demonstrate?

Here is what the Wisconsin Department of Natural Resources says about the requirements for land spreading liquid manure:

> *"The pathogen reduction component comes from s. NR 151 Wisconsin Admin Code. In 2018, NR 151 included Silurian Bedrock Performance Standards that regulates manure applications on Silurian bedrock areas with soil depths with less than 20 feet to bedrock. To comply with NR 151.075, farms need to conduct pre-tillage, incorporate/ inject manure within 24 hours of the application, and use* ***one*** *of the following practices: limit their application rates, land apply within 10 days of planting date/applied on a perennial or established crop, or reduce pathogen levels via practices to a fecal coliform bacteria density of less than 500,000 most probably number or colony-forming units per 100 milliliter sample. Some of the finer details, like the limited application rates, fluctuate depending on depth to bedrock and soil textures*

Dairy Dreams runs four digesters at a Kewaunee County farm. Despite Niles' reassurances, tests this year in rural Kewaunee County have identified wells contaminated with E. coli, some not far from Dairy Dreams operations.

Dairy Dreams Digesters. CWAC photo.

Although digestion can be an effective way to kill pathogens, to what extent and the efficacy is dependent upon different factors For instance, a higher digester temperature will kill more pathogens.

The University of Nebraska-Lincoln has shown that thermophilic (temperatures greater than 40°C) anaerobic digestion can reduce the number of antimicrobial resistant bacteria. However, reporting in Wis-CONTEXT, Borchardt noted that while some pathogens were mostly wiped out, others survived at greater rates. Unfortunately, higher temperatures are not optimal for producing methane. Since most of these operations are mesophilic, meaning they heat around 20-45°C to increase methane gas, so they are not as effective at reducing pathogens. Unfortunately, a decision must be made to increase profits or kill pathogens.

Dairy Dreams manure lagoon circled to give an idea of the size of manure lagoons. Courtesy Google Earth.

Even after digestion another problem arises in the storing of the liquids in manure lagoons. Manure in a lagoon can breed more pathogens during storage. These lagoons are cited as a source of water contamination in Borchardt's study. Lagoons are known to leak and even expected to leak.

While anaerobic manure digestion is a step in the right direction, it is just one tool to combat problems that occur with farms of any size. All citizens of Wisconsin should be stewards of our waters. We all should advocate for stricter regulations to increase protections of our environment. A step in the right direction does not replace vigilance.

Farming is necessary and with an ever-increasing population food production needs to keep up with demand. While some may advocate for ending all large-scale farming ventures, proper regulations and accountability may be the only answer. Many of these digestors in Northeast Wisconsin have used federal money in their construction. These companies and farms that utilize digestors should be held to a high standard and be responsible for damages caused by their operation. Citizens should not be left footing the bill for agricultural malfeasance. Justice demands that the proper person, group, organization is held accountable for poisoning our water and land.

Resource

WisCONTEXT. What Manure Digesters Can And Can't Do. Pollution Control And Energy Promises Come With Limits. https://www.wiscontext.org/what-manure-digesters-can-and-cant-do

Meet Our Interns

Alexandra Davis is a 5th-year student at the University of Wisconsin- Green Bay, majoring in Biology with an emphasis in Ecology and Conservation and minoring in Environmental Science. Her hobbies include camping, exploring State and National Parks, and spending time cultivating plants. She is thrilled to have this opportunity with CWAC.

Sydney Gang is a sophomore at UWGB majoring in Business Administration with an emphasis in Pre-Law and Entrepreneurship. She loves the environment and has a passion for protecting it. Collaborating with the CWAC will allow her to explore another possible path in law for her future career. Her hobbies include playing sports, enjoy the outdoors, and hang out with friends.

An Update from Former Interns

Abrahm Hill. "During the summer of 2020 I worked as an intern for CWAC. A year later I am still using much of what I learned at CWAC, and the internship experience has accelerated me toward an environmental career. Currently, I am finishing up my final semester of college soccer and courses at UWGB and working as a teaching assistant for an environmental law course.

I am also applying to law schools to pursue an Environmental Law degree. Upon graduation I am looking to perform a 6-month program with the AmeriCorps until I start law school in the fall of 2022. I hope to continue to advocate for greater environmental sustainability in the world, just as CWAC has done in Northeast Wisconsin."

Daniel Shepard

After interning at CWAC in 2017, I've been exploring the intersection of ethics, environmental sustainability, and global systems. I graduated from Princeton in the spring of 2019 after writing my philosophy thesis on individual responsibility and climate change.

After graduation, I moved to Boston and started working for a sustainability non-profit called Ceres. I've been at Ceres for the last two years now working to push some of the largest food and beverage companies to integrate sustainability considerations into their everyday business decision making, especially in their agricultural supply chains. My time at Ceres has been especially focused on elevating the importance of reducing companies' impacts on water use and water pollution.

The highlight of the past few years was my wedding. Above is a photo of my wife and me atop Mt. Evans in Colorado. You may contact Dan at danielos@alumni.princeton.edu

Clean Water Action Council's

Food Waste Composting Workshop

with Dean Hoegger

Join us for a composting workshop with Clean Water Action Council President Dean Hoegger. Learn how to compost food waste at home and how it benefits the environment!

Date: Tuesday, September 14, 6:30-7:30 PM
Location: The Lyric Room
233 N Broadway, Green Bay

FREE REGISTRATION

To register, send us an email to contact@cleanwateractioncouncil.org or leave a message at 920-421-8885.

A limited number of composters will be available for purchase at the event for $54.

Dine and Bid for the Environment

Silent Auction! 5:00 - 8:30

FUNDRAISER

Thursday, October 7

Social: 5:00
Silent Auction: 5:00 - 8:30
Dinner: 6:00
Program: 6:30

$25 Dinner & Program (ADVANCE ONLY)

Gluten-Free Dinner, Chicken Quarter or Roasted Portabella

Featuring:
Midwest Environmental Advocates
Executive Director Tony Wilken-Gibart

Music by:
Philip Nelson and Distilled Spirits

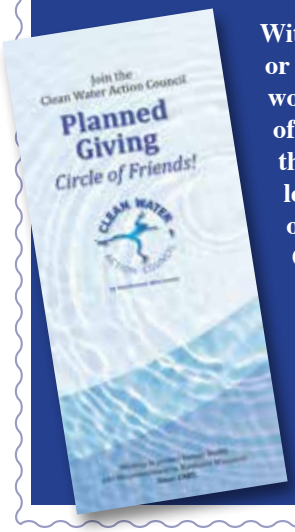
DOOR PRIZES!

Riverside Ballroom
1560 Main St., Green Bay

A fundraiser for
The Clean Water Action Council
Your environmental advocacy group in Northeast Wisconsin

PURCHASE TICKETS ONLINE AT:
www.cleanwateractioncouncil.org

Join Our Planned Giving Circle of Friends



Without planned giving donations or legacies, our organization would not be able to do the work of protecting human health and the environment at its current level. Please consider supporting our endowment fund at the Greater Green Bay Community Foundation with a gift in your will or bequest.

Contact us for a Planned Giving Brochure

Have you renewed your membership?

See your newsletter label or e-mail noticewhich indicates the last year that you donated.

Thank you!

Intern scholarships and technology upgrades are made possible by the generous donation from Marge and Ken Bukowski.

This newsletter is made possible by the generous donation from the Sustainability Committee of the Sisters of St. Francis of the Holy Cross.

Donations for legal fees, the newsletter, health forum presentations, intern scholarships, office rent, and other programming are greatly appreciated.

Dine and Bid for the Environment

Thursday, October 7, 5:00-8:30 p.m., Riverside Ballroom, 1560 Main St., Green Bay

Our annual banquet features a silent auction with a huge selection of art, collectables, and unique gift certificates. Dorothy Summers, harpist, will play before dinner. Our dinner choices are gluten free. Choose a roasted chicken quarter or roasted portabella mushroom. Both include a salad, garlic mashed potatoes, vegetable, coffee, and dessert. Tables can be reserved for parties of six or more.

The program includes our **Environmental Citizen Award, which will be presented to Al Gedicks** of the Wisconsin Resources Protection Council who will speak briefly about the status of the Back 40 Mine.

The featured speaker is Tony Wilkin Gibart, Executive Director of Midwest Environmental Advocates. Tony will speak about the status of current legal actions to protect human health and the environment, including our involvement in the WMC vs DNR lawsuit, and the importance of environmental action organizations.

Music

Philip Nelson and Distilled Spirits will entertain after the program.

COVID-19 Information

We are limiting attendance to 175 people at the Riverside Ballroom which has a capacity of 575 people and will follow the CDC's local recommendations. Masks will be encouraged before and after dinner and will be available at the door. Personal pens will be provided for the silent auction. Tables will be limited to six people. You can buy five tickets, get one free and have your group's own table. Takeout meals will be available upon request. Philip Nelson and Distilled Spirits will entertain after the program.

----------Cut here and return----------

Please consider ordering a block of tickets to sell to friends. Buy 5 tickets, get one free and hove your own table for six.

Please indicate the # of your dinner preference(s):

( ) Slow-roasted Chicken Quarter (Gluten-free)

( ) Mushroom Marinara (Vegan, Gluten- free)

Each entre includes a mixed green salad, garlic mashed potatoes, vegetable, and dessert (gluten-free), and coffee.

# of tickets_____@ $25 each

# of student tickets_____@ $20 each

for a total of $_____

(Sixth $25 ticket is free)

_____ Yes, I have an item for the silent art auction/door prizes. I will bring it by 5:00 or call Dean at 920-421-8885 for prior pickup (preferred).

Ticket Order Form for $25 Advance Tickets, Students $20. (Please place your order by Friday, October 1

Send tickets to (name/address):

_____

_____

_____

_____

Phone #: _____

(in case we have a question on your order)

Please include payment with your order.

Checks payable to:

Clean Water Action Council

P.O. Box 9144

Green Bay, WI 54308

Or order online with an additional service fee at:

https://www.cleanwateractioncouncil.org/events/

MARK YOUR CALENDAR! Meetings, Events and Happenings

ONLINE EVENTS:

Friday, September 17
CWAC, intervenor litigant on the side of the DNR in WMC vs DNR

Responses to our motion to intervene were due on July 16th and our reply was submitted on July 28th. The court will hear arguments and potentially decide on the motion at the hearing on September 17 at 9:00 am and it will be a virtual hearing.

Monday, October 4
Should You Drink That? The Unfolding Story of PFAS in Our Lives

Learn how PFAS has become more present in our lives and how it affects our health on October 4 from 6:00-7:30 pm. Jeff Lamont of Save our H2O, Erika Schreder of Toxic-Free Future, and Deanna White of Clean Water Action in Minnesota will speak on safe standards of drinking water and how you can protect yourself and your community. Register by October 1 at https://tinyurl.com/PFAS-OurLives.

Wednesday December 8- Thursday December 9
National Zero Waste Virtual Conference

This is a two-day educational and networking event organized by Zero Waste USA in partnership with the National Recycling Coalition. The first day will focus on Zero Waste Business while the second will cover Zero Waste Communities. The conference runs on December 8 - 9, 2021. To register, go to: https://zwconference.org

OTHER EVENTS:

Tuesday, September 14
Food waste composting workshop. Compost your food waste.

CWAC is offering a food waste composting workshop on September 14 from 6:30-7:30 pm at the Lyric Room, 233 N Broadway Green Bay. Composters will be available at our cost for $54 and includes a 2021 membership for new members. Email us to register at contact@cleanwateractioncouncil.org. Contact us if you would like to host a workshop in your area.

Saturday, September 18
Beach Clean Up

Lakeshore Natural Resource Partnership is hosting a beach cleanup for Sheboygan and Manitowoc beaches on **September 18, 9:00-11:00**. All ages and skill levels are welcome! Gather with your friends and family to pick up trash along beautiful Lake Michigan for a few hours. For more info, assistance signing up, or to request cleanup supplies in Sheboygan, email ROLF@LNRP.org. For more info, and to register for a Manitowoc beach, please contact Kim (920) 262- 1993.

Thursday, October 7
CWAC Banquet

Join us at the historic Riverside Ballroom in Green Bay, **October 7, 5:00 - 8:30 PM**. Our annual banquet features a silent auction with a huge selection of art, collectables, and unique gift certificates. 10% of silent auction sales will go to Midwest Environmental Advocates to help cover legal fees in our WMC vs DNR case.

Dorothy Summers will provide pre-dinner harp music. Our dinner choices are a roasted chicken quarter or a roasted portobello mushroom, including salad, sides, dessert, and coffee, all gluten free.

A program will follow the dinner and will include CWAC's environmental citizen award and a talk by Tony Wilkin Gibart of Midwest Environmental Advocates regarding the importance of citizen action groups and current legal actions to protect human health and the environment. The talented duo, Barbara and Phil Nelson, will provide musical entertainment after the presentation.

Tickets may be purchased using the order form in this newsletter or on our website at https://www.cleanwateractioncouncil.org/events/ Group offer: **Buy 5 tickets, get one free and reserve your own table if tickets are purchased directly from us.**

Friday, November 12
Fox-Wolf Watershed Alliance Fall Open House

The Fox-Wolf Watershed Alliance will be hosting an open house from 3:30-7:00 pm at their new office on Wisconsin Ave. in Appleton! Learn about the amazing work done by the Alliance in the river basin and how you can support it while enjoying drinks and refreshments. There is no cost, but registration will be available at the FWWA website, https://fwwa.org/.

PLEASE JOIN OTHER CWAC MEMBERS FOR SOME GREEN BAY PACKERS GAMES AS A CONCESSION VOLUNTEER

Experience the game day excitement at Lambeau Field and help us earn some operating funds. Game dates include October 3, and November 28, and possibly more dates.
Email contact@cleanwateractioncouncil.org or phone us at 920-421-8885 for the details.

Current training dates are:
Tuesday September 14 @ 5 pm or
Thursday September 16 @ 2 pm

Join or Renew Your Membership to Clean Water Action Council for 2021!

☐ Renewal ☐ New Member Date_____

( ) $25 Individual ( ) $35 Family **(this amount would really help)**

( ) $50 Sustaining ( ) $100 Donor ( ) $500 Benefactor

( ) Non-member donation of $ _____for_____

( ) Other $_____

( ) Please send me information about making a planned gift to CWAC

Name(s)_____

Address _____

City _____State _____ Zip _____

Phone _____

E-mail _____

Receive FREE newsletters with each membership.

Please choose one...

☐ Printed version ☐ E-mailed version

PLEASE VOLUNTEER!
(BE SURE TO PROVIDE PHONE NUMBER ABOVE)

☐ the newsletter ☐ events ☐ work at office ☐ mailings

☐ joining or leading one of the committees ☐ other

Send check or money order to: **Clean Water Action Council**
P.O. Box 9144
Green Bay, WI 54308

CWAC is a registered non-profit organization.
Your contributions may be tax-deductible. ***Thank you!***

Office location:
A307 MAC Hall, UW-Green Bay
2420 Nicolet Drive
Green Bay, WI 54311

www.cleanwateractioncouncil.org

Find us on Facebook or updates on hearings and current or upcoming events.

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Contributions may be tax-deductible.

CONTACT US

By phone: 920-421-8885
If you leave us a message, we will try to get back to you within 24 hours.

By mail:
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P.O. Box 9144, Green Bay, WI 54308

By e-mail:
contact@cleanwateractioncouncil.org

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of Northeast Wisconsin
P. O. Box 9144
Green Bay, WI 54308

Order your tickets today!
CWAC BANQUET
October 7, 2021

in this issue...

For previous newsletters, go to: www.cleanwateractioncouncil.org